

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

**GREGORY T. KOVACS**

Serial No. Not Yet Assigned

Filed: Herewith

For: Addressable Biologic Electrode  
Array

Group Art Unit: 1743

Examiner: Soderquist

**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97–1.98, information relating to the above–identified application is hereby disclosed. The accompanying Form PTO SB/08A provides a listing of documents that may be relevant to the subject application.

It is requested that the Examiner fully consider the art cited in the accompanying Form SB/08A, initial the left–most column of the form adjacent each cited reference,

---

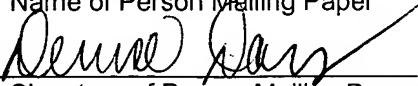
**CERTIFICATE OF MAILING**  
(37 C.F.R. §1.10)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as 'Express Mail Post Office To Addressee' in an envelope addressed to the Commissioner for Alexandria, VA 22313-1450.

EV337191160US  
Express Mail Label No.

January 23, 2004  
Date of Deposit

Denise N. Doss  
Name of Person Mailing Paper


  
Signature of Person Mailing Paper

and return a copy for Applicants' records. It is further requested that the art be cited on the cover of any patent issuing from the subject application. In accordance with §1.98(d), copies of the references listed on the attached Form PTO SB/08A are not enclosed herewith because they were previously cited by or submitted to the Patent and Trademark Office in prior parent applications for which a claim for priority under 35 U.S.C. §120 has been made in the instant application. Accordingly, Applicants will provide duplicate copies in respect of the present case only if the Examiner so desires.

This statement should not be construed as a representation that more material information does not exist or that an exhaustive search of the relevant art has been made. Nor does this statement constitute an admission by Applicants or Applicants' agent that the information provided herein is necessarily prior art to Applicants' invention. Moreover, Applicants reserve the right to establish the patentability of the claimed invention over any of the listed documents should they be applied there—against as references. Please charge any deficiency or credit any overpayment to Deposit Account No. 50-2862.

Respectfully submitted,

O'MELVENY & MYERS LLP

By:   
Michael S. Davidson  
Reg. No. 43,577

Dated: January 23, 2004  
MSD/dnd

IR1:1051728.1

**34263**  
PATENT TRADEMARK OFFICE  
O'Melveny & Myers LLP  
114 Pacifica, Suite 100  
Irvine, CA 92618-3315  
(949) 737-2900

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;">(use as many sheets as necessary)</p>				<b>Complete if Known</b>	
				Application Number	Not Yet Available
				Filing Date	January 23, 2004
				First Named Inventor	KOVACS, Gregory T.A.
				Group Art Unit	Not Yet Available
				Examiner Name	Not Yet Available
				Attorney Docket Number	0612404-435
Sheet	1	of	3		

Examiner Initials *	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	Number	Kind Code <sup>2</sup> (if known)		
	US-3430072		Stevens	02/25/69
	US-3957592		Young	05/18/76
	US-4772851		Schattschneider	09/20/88
	US-4787963		MacConnell	11/29/88
	US-4924224		Takahashi et al	05/08/90
	US-5178161		Kovacs	11/12/93
	US-5314495		Kovacs	05/24/94
	US-5378343		Kounaves et al	01/03/95
	US-5434049		Okano et al	07/18/95
	US-5445934		Fodor et al	08/29/95
	US-5527670		Stanley	06/18/96
	US-5605662		Heller et al	02/25/97
	US-5632876		Zanzucchi et al	05/27/97
	US-5632957		Heller et al	05/27/97
	US-5653939		Hollis et al	08/05/97
	US-5849486		Heller et al	12/15/98
	US-5891630		Eggers et al	04/06/99
	US-5965452		Kovacs	10/12/99
	US-6017696		Heller et al	01/25/00
	US-6048690		Heller et al	04/11/00
	US-6051380		Sosnowski et al	04/18/00
	US-6054270		Southern	04/25/00
	US-6258606		Kovacs	07/10/01

Examiner Initials *	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sub>6</sub>
	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
	EP	0376611	A2	Kovacs et al	07/04/90	

Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume–issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CONNOLLY, et al., "Microelectronic & Nanoelectronic Interfacing Techniques For Biological Systems", Sensors & Actuators B, 6, 1992, 113-121.	
	DEES, et al., "Experimental Observations Of Free-Convection Mass Transfer To A Horizontal Surface With A Micromosaic Electrode", J. Electrochem. Soc., 134, 2, February 1987, 369-377.	
	FICCABRINO, et al., "Array Of Individually Addressable Microelectrodes", Sensors & Actuators B, 18-19, 1994, 675-677.	
	FIELDEN, et al., "Voltammetric Information From Arrays Of Individually Controlled Electrodes: Their Potential For Industrial Process Measurements", Analytica Chimica Acta, 273, 1993, 111-121.	
	FUHR, et al., "Travelling Wave-Driven Microfabricated Electrohydrodynamic Pumps For Liquids", J. Micromech. Microeng., 4, 1994, 217-226.	
	GRAY, et al., "MOS Operational Amplifier Design – A Tutorial Overview", IEEE Journal Of Solid-State Circuits, SC-17, 6, December 1982, 969-982.	

Please type a plus sign (+) inside this box →



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				<b>Complete if Known</b>	
				Application Number	Not Yet Available
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Filing Date	January 23, 2004
				First Named Inventor	KOVACS, Gregory T.A.
				Group Art Unit	Not Yet Available
				Examiner Name	Not Yet Available
				Attorney Docket Number	0612404-435
(use as many sheets as necessary)					
Sheet	2	of	3		

Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	GU, et al., "Microcomputer Controlled FFT Electrochemical Impedance Measurement System", Wuhan Daxue Xuebao, Ziran Kexueban, 1987, 65-71.	
	HARRINGTON, et al., "Mutiple Electrode Potentiostat", Rev. Sci. Instrum., 60, 10, October 1989, 3323-3328.	
	HERMANSON, et al., "Immobilized Affinity Ligand Techniques" Academic Press, Inc., 1992, 410-417.	
	HERMES, et al., "An Amperometric Microsensor Array With 1024 Individually Addressable Elements For Two-Dimensional Concentration Mapping", Sensors & Actuators, B, 21, 1994, 33-37.	
	HOOGVLIET, et al., "Multichannel Amperometric Detection System For Liquid Chromatography & Flow Injection Analysis", Anal. Chem., 63, 1991, 2418-2423.	
	KAKEROW, et al., "A Monolithic Sensor Array Of Individually Addressable Microelectrodes", Sensors & Actuators A, 43, 1994, 296-301.	
	LIVACHE, et al., "Preparation Of A DNA Matrix Via An Electrochemically Directed Copolymerization Of Pyrrole & Oligonucleotides Bearing A Pyrrole Group", Nucleic Acids Research, 22, 15, 1994, 2915-2921.	
	MATSUE, et al., "Multichannel Electrochemical Detection System For Flow Analysis", Anal. Chem., 62, 1990, 407-409.	
	MEUNIER, et al., "High-Accuracy Oxygen Polarograph For Photosynthetic Systems", Rev. Sci. Instrum, 59, 3, March 1988, 486-491.	
	MEYER, et al., "Two-Dimensional Imaging Of O <sub>2</sub> H <sub>2</sub> O <sub>2</sub> , & Glucose Distributions By An Array Of 400 Individually Addressable Microelectrodes", Anal. Chem., 67, 1995, 1164-1170.	
	PENTARI, et al., "Construction & Applications Of A Microcomputer Cotrolled Pulsed Amperometric Detector System", Anal. Instrum, 15, 4, 1986, 329-345.	
	REAY, et al., "Microfabricated Electrochemical Analysis System For Heavy Detection", Sensors & Actuators B, 34, 1996, 450-455.	
	TALLMAN, et al., "A Wide Bandwidth Computer Based Potentiostat For Fast Voltammetry At Microelectrodes", J. Electroanal. Chem., 280, 1990, 327-340.	
	TAYLOR, <u>Immobilized Antibody- and Receptor-Based Biosensors</u> , 1991, 262-303.	
	WHITEHURST, et al., "Actively-Scanned Microelectrode Arrays", 22 <sup>nd</sup> Annual Meeting Of the Society For Neuroscience, 18, 1992, Abstract 22.24.	
	ZIPPER, et al., "Computer-Controlled Monitoring & Data Reduction For Multiple Ion-Selective Electrodes In A Flowing System", Anal. Chem., 46, 1974, 2111-2118.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 3

Complete if Known

Application Number	Not Yet Available
Filing Date	January 23, 2004
First Named Inventor	KOVACS, Gregory T.A.
Group Art Unit	Not Yet Available
Examiner Name	Not Yet Available
Attorney Docket Number	0612404-435

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.